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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714			MOORE, IAN N	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Candidate(s)
	09/688,165	LINDBLOM ET AL.
	Examiner	Art Unit
	Ian N Moore	2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2 and 4-24 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 10 and 20 is/are allowed.
- 6) Claim(s) 1,2,4-6,8,9,11-16,18,19 and 21-24 is/are rejected.
- 7) Claim(s) 7 and 17 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Response to Amendment

1. This is in response to amendment filed on June 23, 2004 (paper # 8).
2. Claims 1-2,4,7-15,17-20 are amended.
3. New Claims 21-24 are added.

Response to Arguments

4. Applicant's arguments with respect to claims 1-2,4-6, 8-9,11-16,18-19, and 21-24 are have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 1,2,4-6,8-9,11-16,18-19 and 21-24, the applicant argued that,
“...Manning'427 does not teach or suggest sending different maintenance cells through two planes in a predetermined sequence, nor does Manning'427 detect switch plane failure based on violation of such sequence...(in page 13, paragraph 3)”

In response to applicant's argument, the examiner respectfully disagrees that Manning'427 does not teach or suggest sending different maintenance cells through two planes in a predetermined sequence, nor does Manning'427 detect switch plane failure based on violation of such sequence. Manning'427 teaches sending different maintenance cells (i.e. communication cells and test cell) through two planes (i.e. foreground and background switches) in a predetermined sequence. Per FIG. 2 TSPP 28 and Serializer 32, col. 5, lines 52-65; note that communication cell is first provided to the serializer 32, then it is provided to the background switch via a background first I/O serial data signal 41. The same communication cell is provided to the TSPP 28, and then it is provided to the foreground switch via a Foreground first I/O serial data signal 40. Also, note that the test cell is also sent

to both switch fabrics in similar arrangement. Thus, the different maintenance cells are applied in a prearranged sequential order. See col. 6, lines 26-33.

Manning'427 also discloses detecting switch plane failure based on violation of such a sequence (see FIG. 2, Deserializer 34 and FSPP 30; see col. 6, lines 36-48; note that as described above TSPP of I/O module send a test packet to both foreground and background switch fabrics. FSPP 30 of I/O module detects an error/failure after performing the error checking on the received test cell. An error/failure occurs due to the failure/error in foregroudn/backgournd switch fabric during transmission, and it results an invalid/improper/unexpected data (i.e. receiving/arriving out-of-sequence/unexpected test cell) in the test cell received at the output of I/O module. Also, note that communication cell is routed to/from I/O module from/to both foreground and background switch fabrics. Similarly the test cell is also routed to/from I/O module from/to both foreground and background switch fabrics.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1, 2, 4-6, and 11-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Manning (U.S. 5,909,427) in view of Uchida (U.S. 5,313,453).

Regarding Claims 1 and 11, Manning'427 discloses apparatus and a method of operating a cell switch (see FIG. 1) comprising:

a first switch plane (see FIG. 1, Switch Control Module foreground 10) comprising a first switch core (see FIG. 1, Foreground switch fabric 26);

a second switch plane (see FIG. 1, Switch Control Module background 12) comprising a second switch core (see FIG. 2, Background switch fabric 126);

a sender switch port interface unit (see FIG. 1, Input of I/O module #1);

a receiver switch port interface unit (see FIG. 1, Output of I/O module #1);

wherein the sender switch port interface unit sends maintenance cells (see FIG. 2, and col. 5, lines 52 to col.6, lines 32; note that communication cell and the test cell are the maintenance cells) to the receiver switch port interface unit via the first switch plane and the second switch plane (see FIG. 2, a Foreground first I/O serial data signal 40 towards the foreground switch fabric 26, and a background first I/O serial data signal 41 towards the background switch fabric; note that TSPP of the I/O module sends the maintenance/OAM (Operation, Administration and Maintenance) cells to FSPP of I/O module), the maintenance cells being applied to the first switch plane and the second switch plane in a predetermined sequence (see FIG. 2 TSPP 28 and Serializer 32, col. 5, lines 52-65; note that

communication cell is first provided to the serializer 32, then it is provided to the background switch via a background first I/O serial data signal 41. The same communication cell is provided to the TSPP 28, and then it is provided to the foreground switch via a Foreground first I/O serial data signal 40. Also, note that the test cell is also sent to both switch fabrics in

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similar arrangement. Thus, the maintenance/OAM cells are applied in a prearranged sequential order. See col. 6, lines 26-33);

to wherein the receiver switch port interface unit detects an erroneous switch plane when the maintenance cells from the sender switch port interface unit do not arrive in the predetermined sequence (see FIG. 2, Deserializer 34 and FSPP 30; see col. 6, lines 36-48; note that as described above TSPP of I/O module send a test packet to both foreground and background switch fabrics. FSPP 30 of I/O module detects an error/failure after performing the error checking on the received test cell. An error/failure occurs due to the failure/error in foregroudn/backgournd switch fabric during transmission, and it results an invalid/improper/unexpected data (i.e. receiving/arriving out-of-sequence/unexpected test cell) in the test cell received at the output of I/O module. Also, note that communication cell is routed to/from I/O module from/to both foreground and background switch fabrics. Similarly the test cell must be routed to/from I/O module from/to both foreground and background switch fabrics.)

Manning'427 does not explicitly disclose sending first plane maintenance cells but not via the second switch plane, and sending second plane maintenance cells but not via the first switch plane, wherein the each of the first plane maintenance cells and second plane maintenance cells including a plane indicator which informs the receiver switch port interface unit whether the maintenance cell traveled through the first switch plane or the second switch plane.

However, the above-mentioned claimed limitations are taught by Uchida'453. In particular, Uchida'453 teaches sending first plane maintenance cells (see FIG. 8B, test cell

with first stage tag data 14-15 for first stage switch 201; see col. 13, lines 24-25) via the first switch plane (see FIG. 6, SRM 107 and see FIG. 10, SRM 1001-1-1; or FIG. 2, first Switch 201 at the top), but not via the second switch plane (see FIG. 7, To next switch 201; see col. 12, lines 59-64; note that a test cell which must not be switched by current switch is send to a next switch through a line branching before header checker 701. Each switch 201 only switches the test cell with its corresponding switched tag ID, that is, the test cell is not switched via the next switch 201), and

sending second plane maintenance cells (see FIG. 8B, test cell with first stage tag data 12-13 for second stage switch 201; see col. 13, lines 24-25) via the second switch plane (see FIG. 6, SRM 107; FIG. 10, SRM 1001-2-1; or FIG. 2, second Switch 201 at the bottom) but not via the first switch plane (see FIG. 7, To next switch 201; see col. 12, lines 59-64; note that a test cell which must not be switched by current switch is send to a next switch through a line branching before header checker 701. Each switch 201 only switches the test cell with its corresponding switched tag ID, that is, the test cell is not switched via the next switch 201),

wherein the each of the first plane maintenance cells and second plane maintenance cell a plane indicator (see FIG. 8B, the first stage tag data 14-15 for first stage switch 201 and the second stage tag data 12-13 for the second switch 201; see col. 13, lines 24-25) which informs the receiver switch port interface unit (see FIG. 6, Output trunk 110) whether the maintenance cell traveled through the first switch plane (see FIG. 6, SRM 107 and see FIG. 10, SRM 1001-1-1) or the second switch plane (see FIG. 6, SRM 107; FIG. 10, SRM 1001-2-1; see col. 3, line 20 to col. 55; note that each test cell with a switch tag for each switch is

received at the output trunk. The switch tag identifies the switching stage ID or switch ID where the test cell is routed);

wherein the receiver unit detects an error (see FIG. 5B, Test Cell checker 513 detects the abnormalities) when first plane maintenance cells and the second plane maintenance cells from the sender unit (see FIG. 5B, test cell inserter 511 and cell tag attacher 512) do not arrive in the predetermined sequence (see col. 11, lines 46 to col. 25; note that test cell checker detects abnormalities when the test cell routed through the first stage switch and second stage switch does arrive in consecutive sequence order).

In view of this, having the system of Manning'427 and then given the teaching of Uchida'453, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Manning'427, by providing a test cell with a tag ID for each switch stage, as taught by Uchida'453. The motivation to combine is to obtain the advantages/benefits taught by Uchida'453 since Uchida'453 states at col. 5, line 15-25 that such modification would detect the error/faults by efficiently testing all paths configured by respective switches.

Regarding Claim 2 and 12, the combined system of Manning'427 and Uchida'453 first plane maintenance cells applied to first switch plane and second plane maintenance cells applied to second maintenance cells as described above in claim 1 and 11. Manning'427 further discloses wherein the predetermined sequence comprises maintenance cells applied to the first switch plane and the second switch plane in alternation (see FIG. 2 TSPP 28 and Serializer 32, col. 5, lines 52-65; note that communication cell is first provided to the

serializer 32, then it is provided to the background switch via a background first I/O serial data signal 41. The same communication cell is provided to the TSPP 28, and then it is provided to the foreground switch via a Foreground first I/O serial data signal 40. Also, note that the test cell is also sent to both switch fabrics in similar arrangement. Thus, the maintenance/OAM cells are applied in a prearranged sequential order of fluctuation/alternation by sending first to the foreground and then to the background switches. See col. 6, lines 26-33).

Regarding Claim 4 and 14, the combined system of Manning'427 and Uchida'453 discloses the first plane maintenance cells and second plane maintenance cells as described above in claim 1 and 11. Furthermore, Manning'427 discloses wherein the sender switch port interface unit sends a cycle of maintenance cells to the receiver switch port interface unit (see FIG. 2, TSSP 28 and FSSP 30; col. 5, lines 52 to col.6, lines 32; note that each I/O module is coupled to both switch fabrics, and the OAM cells are switched between I/O modules. Thus, one TSPP must be able to send a communication cell to FSPP of the I/O module#1 and a test cell to the other FSPP of I/O module#2. In particular, the OAM cells are transmitted/received between every input and output once every 5 milliseconds time cycle.), the cycle comprising: plural sets of the predetermined sequence (see FIG. 2 TSPP 28 and Serializer 32, col. 5, lines 52-65; note that communication cell is first provided to the serializer 32, then it is provided to the background switch via a background first I/O serial data signal 41. The same communication cell is provided to the TSPP 28, and then it is provided to the foreground switch via a Foreground first I/O serial data signal 40. Also, note that the test cell is also sent

to both switch fabrics in similar arrangement; see col. 6, lines 26-33. Thus, two sets of OAM cells (i.e. one set consist of communication cells and the other set consists of test cells) are applied in a prearranged sequential order of fluctuation/alternation by sending first to the foreground and then to the background switches.), and

wherein at least a portion of the maintenance cell of one of the sets of the cycle is inverted with respect to a corresponding portion of the maintenance cell of another of the sets of the cycle (see col. 5, lines 55 to col. 6, lines 32, note that initially communication cells must be send to both fabrics for bandwidth allocation set up and queries, and then test cells must be send in order to determine the failure/error. FIG. 2, col. 6, lines 16-32; a test cell must have an inverted code compare to a code of communication cell. Also, a cell switch is the ATM switch, which utilizes ATM cells formats; see col. 5, lines 15-19. Also, note that it is well known in the art that ATM standard header consists of payload type (PT) field where PT coding contains various coding formats for OAM cell in order to identify different types of OAM cells. Thus, it is clear that when a pair of OAM cells (i.e. communication and test cells) is transmitted to the foreground/background switch fabric, a different PT field code must be used (i.e. by inverting PT codes). Thus, at least a portion of communication cells is non-inverted, and at least a portion of test cell is inverted.)

Regarding Claim 5 and 15, Manning'427 discloses all aspects of the claimed invention set forth in the rejection of Claim 1,4,11 and 14, and further teaches wherein the cycle comprises two sets of the predetermined sequence of maintenance cells (see col. 5, lines 35 to col. 6, lines 25, two sets of OAM cells (i.e. one set consist of communication cells

and the other set consists of test cells) are applied in a prearranged sequential order of fluctuation/alternation by sending first to the foreground and then to the background switches. Thus, the a set of communication cells must be send to both foreground and background fabrics for communication set-ups, and then a set of test cells must be sent to both foreground and background fabrics for error/fault detection.

Regarding Claim 6 and 16, Manning'427 discloses wherein the receiver switch port interface unit detects an erroneous switch plane by performing error checking with respect to contents of a received maintenance cell (see col. 6, lines 1-48 and col.7, lines 6-22; note that FSPP of I/O module (i.e. at the output) determines/detects an error/failure in the switching fabric by performing CRC according to bits within each received test cell.)

6. Claim 8,9,18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manning in view of Collaud (U.S. 6,307,870).

Regarding Claims 8 and 18, Manning'427 discloses a cell switch comprising:
a switch plane (see FIG. 1, Switch Control Module foreground 10) comprising a switch core (see FIG. 1, Foreground switch fabric 26);
a sender switch port interface unit (see FIG. 1, Input of I/O module #1);
a receiver switch port interface unit (see FIG. 1, Output of I/O module #1);
wherein the sender switch port interface unit sends a pair of maintenance cells (see FIG. 2, and col. 5, lines 52 to col.6, lines 32; note that communication cell and the test cell are the maintenance/OAM cells.) to the receiver switch port interface unit via the switch

plane (see FIG. 2, a Foreground first I/O serial data signal 40 towards FSPP 30 via the foreground switch fabric 26);

a first maintenance cell of the pair (see FIG. 2, and col. 5, lines 52 to col.6, lines 32; a communication cell for the foreground switch) having a portion thereof inverted with respect to a corresponding portion of a second maintenance cell of the pair (see FIG. 2, col. 6, lines 16-32; a test cell have an inverted code compare to a code of communication cell). Note that a cell switch is the ATM switch, which utilizes ATM cells formats; see col. 5, lines 15-19. Also, note that it is well known in the art that ATM standard header consists of payload type (PT) field where PT coding contains various coding formats for OAM cell in order to identify different types of OAM cells. Thus, it is clear that when a pair of OAM cells (i.e. communication and test cells) is transmitted to the foreground switch fabric, a different PT field code must be used (i.e. by inverting PT codes).

Manning'427 does not explicitly disclose a payload.

However, the above-mentioned claimed limitations are taught by Cunningham'230. In particular, Cunningham'230 teaches a payload portion thereof inverted (see Cunningham'230 see FIG. 2, Inverted payloads and their corresponding label bit ab; col. 3, lines 57 to col. 4, lines 23; note that the payload block is inverted when the label bit ab is set 00).

Note that Manning'427 teaches two switch fabrics where a communication cell and a test cell (i.e. a pair of maintenance cell) are routed to switch fabrics. The header tag/field indicates the payload type for each maintenance cell. Cunningham'230 teaches an inverting payload data and the corresponding label ab indicates whether payload data are inverted. Thus, Manning'427 maintenance cells payload type filed can be modified with the label ab

filed, which indicates and differentiate whether the payloads are inverted or not. In view of this, having the system of Manning'427 and then given the teaching of Cunningham'230, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Manning'427, for the purpose of providing mechanism of inverting the payload data, as taught by Cunningham'230, since Cunningham'230 states the advantages/benefits at col. 3, lines 59-62, col. 22, lines 20 to col. 2, lines 20 that it would avoid significant imbalance or disparity in the occurrence of differently-valued symbols, provide uniquely identifiable control signals which can be embedded in the encoded data stream. The motivation being that by inverting the payload data according to differences/imbalances/disparity of transmit data, it can assist in maintain synchronization of circuit operation while avoiding the problems of transmission through the system.

Regarding Claims 9 and 19, Manning'427 discloses a second switch plane (see FIG. 1, Switch Control Module background 12. Also, see col.4, lines 24-30, note that both foreground and background are interchangeable modules; thus, they must have the same functionality, and the disclosures that are applicable to foreground control module 10 is also applicable to background module 12.) Through which the sender switch port interface unit also sends a second pair of maintenance cells (see FIG. 2, and col. 5, lines 52 to col.6, lines 32; note that communication cell and the test cell are the maintenance/OAM cells.) to the receiver switch port interface unit (see FIG. 2, a Background first I/O serial data signal 41 towards FSPP 30 the background switch fabric 126),

a first maintenance cell of the second pair (see FIG. 2, and col. 5, lines 52 to col.6, lines 32; a communication cell for background switch) having a predetermined portion thereof inverted with respect to a corresponding portion of a second maintenance cell of the second pair (FIG. 2, col. 6, lines 16-32; a test cell must have an inverted code compare to a code of communication cell). Note that a cell switch is the ATM switch, which utilizes ATM cells formats; see col. 5, lines 15-19. Also, note that it is well known in the art that ATM standard header consists of payload type (PT) field where PT coding contains various coding formats for OAM cell in order to identify different types of OAM cells. Thus, it is clear that when a pair of OAM cells (i.e. communication and test cells) is transmitted to the foreground switch fabric, a different PT field code must be used (i.e. by inverting PT codes).

Cunningham'230 teaches a payload portion thereof inverted (see Cunningham'230 see FIG. 2, Inverted payloads and their corresponding label bit ab; col. 3, lines 57 to col. 4, lines 23; note that the payload block is inverted when the label bit ab is set 00).

In view of this, having the system of Manning'427 and then given the teaching of Cunningham'230, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Manning'427 as taught by Cunningham'230, for the same purpose and motivation as described above in claims 8 and 18.

7. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manning'427 and Cunningham'230, as applied to claims 8 or 18 above, and further in view of Kozaki (U.S. 5,500,851).

Regarding claims 21-24, the combined system of Manning'427 and Cunningham'230 discloses the payload portion of the first maintenance cell of the second pair as described above in claims 8,18, 9 and 19 above. Manning'427 further discloses the first maintenance cell testing the synchronization of switch core (see col. 5, line 45-65; note that communication cell tests whether the foreground switching plane and background switching plane and their controllers are synchronized or lock-step.)

Neither Manning'427 nor Cunningham'230 explicitly discloses a bit pattern, which tests a cross-point buffer memory.

However, the above-mentioned claimed limitations are taught by Kozaki'851. In particular, Kozaki'851 teaches wherein the maintenance cell is a bit pattern (see FIG. 11, a test cell pattern; see col. 11, lines 65 to see col. 12, lines 24) which tests a cross-point buffer memory of switch core (see FIG. 2, Shared Buffer Memory 11 of the switching unit 1 which is the cross connection/switching point between In and Out line interface unit 2) see col. 2, lines 1-44; note that a test cell with test cell pattern is written into read from the buffer memory of a given switch unit in order to test the buffer memory).

In view of this, having the combined system of Manning'427 and Cunningham'230, then given the teaching of Kozaki'851, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Manning'427 and Manning'427, for the purpose of providing a test cell with the test pattern which tests the cross connect buffer memory, as taught by Kozaki'851, since Kozaki'851 states the advantages/benefits at col. 2, lines 35-40 that it would provide testing of normalcy

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of the function in the switch unit. The motivation being that by testing the normalcy of the switch unit, it would be possible to easily finds a faulty switch unit.

Allowable Subject Matter

8. Claims 10 and 20 are allowed.
9. Claims 7 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N Moore whose telephone number is 703-605-1531. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 703-308-7828. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
8/24/04



KENNETH VANDERPUYE
PRIMARY EXAMINER